



Karjaanjoki LIFE – INNOWA (2001-2005)

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*Water for life - Life for Water
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INtegrated river catchment management – a **N**etwork for **O**ptimized **W**ater management, rehabilitation and protection of aquatic ecosystems in Karjaanjoki area (LIFE- 00 ENV/FIN/000668)

- Financing
 - Total costs 2,3 MEuro
 - Native contribution 1,2 MEuro
 - LIFE environment funding 1,1 MEuro
 - Beneficiary City of Lohja, Finland





Karjaanjoki river basin

Facts

River basin area	2046 km ²
Lake percentage	12 %
Lake Lohjanjärvi	92 km ²
Lake Hiidenvesi	30 km ²
Rivers, streams	1800 km
Summer cottages	7600
Inhabitants	50 000



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AIMS

- To develop novel and efficient methods for water management and protection
- To form a functional network of 32 partners and financiers
- To combine wide range of expertise
- Emphasize communication



Photo: Aki Janatuinen



Subprojects

1. Ecological restoration of running waters
2. Management of Lake Lohjanjärvi
3. Master plan for Mustionjokilaakso
4. Water pollution control methods in agriculture
5. Water pollution control methods in forestry
6. Recreational use of Karjaanjoki river basin
7. River basin monitoring systems





Main results and conclusions 1/2

Ecological restoration of running waters- subproject



- Surveys on small streams and brooks, trout stocks and barriers for fish migration are necessary information for river catchment restoration
- Biological and recreational values are being emphasized more in comparison to the financial values



Photo: Esko Vuorinen



Photo: Aki Janatuinen



Main results and conclusions 2/2

Management of Lake Lohjanjärvi-subproject

- Volunteers took part in the monitoring (transparency measurements, algal monitoring)
 - data used in remote sensing
- Mathematical modelling, remote sensing and volunteer monitoring pointed out where restoration activities should be directed
 - The main aim is to direct restoration activities to the upper river basin area



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Implementation of WFD in the area 1/2

- Good status of surface waters is achieved only by comprehensive management and restoration
- Cooperation network created during LIFE project is very important in water management → network needs constant maintenance
- Volunteers are important → more things get done → more resources in use
- Lake Lohjanjärvi important site for volunteer surveillance → volunteer monitoring part of water monitoring elsewhere in Finland

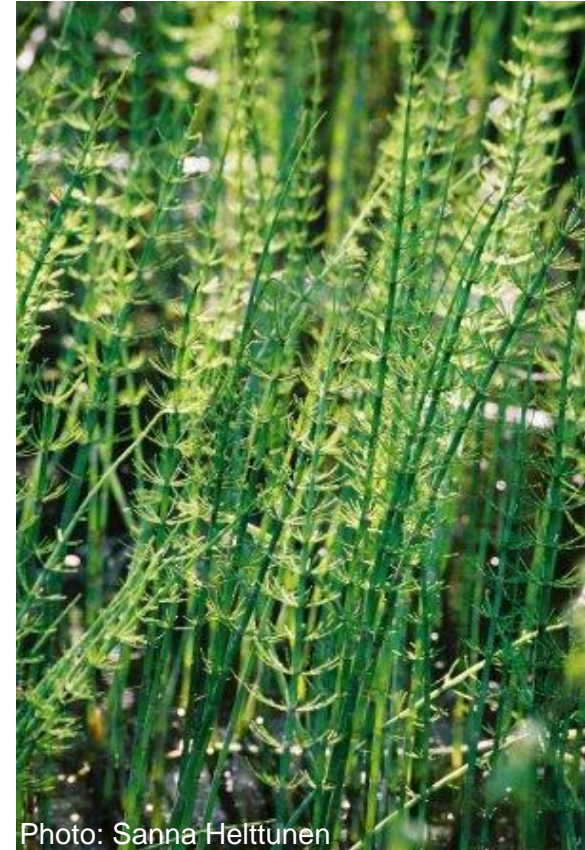


Photo: Sanna Helftunen

Implementation of WFD in the area 2/2

- Barriers for fish migration decrease the ecological classification of rivers
- a wide survey on barriers for fish migration was conducted during the LIFE project
- Surveys give significant information for other restoration activities e.g. for construction of wetlands



Challenges during the project

- Large group of partners
 - Communication with partners took a lot of time → however, the positive effect of this communication can be seen afterwards
- Original project plan
 - Its difficult to make modifications during the project
- Heavy bureaucracy
 - E.g. reporting took longer than expected
 - More flexibility and less bureaucracy



Photos: Sanna Helttunen

Examples of innovations

- Volunteer work
- Networking
- Agriculture and forestry
 - Computer software help in minimising nutrient load and erosion



Photo: Sanna Helttunen



Was LIFE helpful?

- LIFE funding made networking possible
- Numerous projects continue the work after LIFE project



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Suggestions for dissemination

- More active role for LIFE unit for passing on information
- Searching of results and data should be easier
 - Better organised information bank
 - Keywords for internet searches

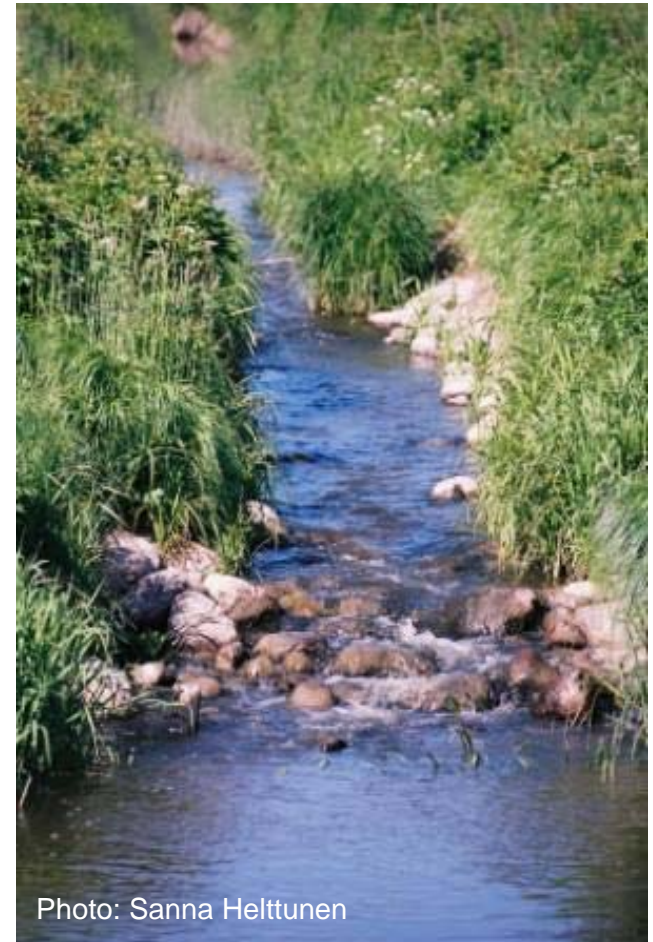


Photo: Sanna Helttunen



Publications

- Karjaanjoki LIFE book
- Reports 54
- Manuscripts 17
- Scientific publications 2
- Brochures 1
- Thesis 2
- International conferences 7
- Visits of international groups 2





After LIFE

- **Restoration of Lake Hiidenvesi 2008-2011 –project** www.hiidenvesi.com
- **Uusimaa Lake Center project (PORLA)** (www.porla.fi)
- **Fish passage and stream survey projects**
 - E.g. Finnish society for stream conservation (www.virtavesi.com)
- **MaaSää and Envisense**
 - (<https://portal.mtt.fi/portal/page/portal/www/Hankkeet/Maasaa>)
- **VeKuMe-project** (FEI – Finnish Environment Institute)
- **UNESCO HELP → Karjaanjoki river basin part of HELP**
- **Water quality service- project** (part of TEKES Water Programme)
- **LIFE+ Environment Policy and Governance 2007, (GISBLOOM application)**





Thank you!



Photo: Sanna Helttunen

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